Remarks

This is filed in response to the Office Action mailed July 21, 2004, citing objection to the drawings and claims, and rejecting the latter under 35 U.S.C. 101 and 103. The amendments, above, combined with the remarks below, remove all grounds for rejection, so that this application can be passed forward to issuance.

At the outset, sheet 3 of the drawings is amended to show — even more clearly — the features that the Examiner asserted, in ¶2 of the Office Action, were not previously shown in the drawing. No new subject matter is added.

Responding to ¶3 of the Office Action, claims 6 and 52 are amended to refer to the parents of the multiply dependent claims in the alternative.

Responding to ¶4 of the Office Action, the Applicant respectfully asserts that the phrases "other control device" and "other control system" in claims 1 and 10 are fully definite. These terms are recited after an enumeration of control devices and control systems and, hence, refer to other such devices and systems not included in the enumeration.

In further response to ¶4 of the Office Action, Applicant respectfully asserts that the term "favorable" in claims 3, 16, 20, and 36 is fully definite. The term is used in respect to a comparison and, hence, refers to a favorable comparison. For example, in the case of claim 3, "favorable" is used in reference a result of comparison of the state of processes following completion of execution of respective instruction sequence. In this context, as well as that in which the objected-to term is used in each of the other cited claims, the term is used in the conventional sense and refers to a comparison which is favorable — the meaning of which is well recognized in the software and other arts.

In still further response to ¶4 of the Office Action, the objected-to parentheses are removed from the independent claims.

Turning to ¶5 of the Office Action, the independent method claims are in full compliance with 35 USC 101. Contrary to the Examiner's assertions, those claims as originally filed included sufficient recitation to insure that they did not embrace mere mental acts. Nonetheless, those claims are further amended to insure restriction to machine-executed methods.

With respect to ¶¶6, *et seq.*, of the Office Action, the sole cited reference, Williams, fails to teach or suggest the claimed invention. In regard to each and every one of the pending claims, for example, Williams fails to teach or suggest apparatus or methods for use "control systems." Such systems, according to convention are used in process control, environmental control, manufacturing control, industrial control, and the like to monitor and control (other) systems, e.g., for the purpose of maintaining desired levels of output, production, etc. That the term "control system" has such a well-defined meaning is evidenced by American Heritage® Dictionary of the English Language and Van Nostrand's Scientific Encyclopedia:

control system n.

A mechanical, optical, or electronic system that is used to maintain a desired output.

The American Heritage® Dictionary of the English Language, Fourth Edition Copyright © 2000 by Houghton Mifflin Company.

Control System. A system in which deliberate guidance, with a minimum assistance of human intervention, is used to achieve a prescribed value of a variable (temperature, pressure, flow, etc.) or group of variables. An automatic control system may be very simple, such as the thermostatic regulation of a refrigerator, oven, or living space, to the full coordination of a complex manufacturing process. Automatic control systems are widely used in the process industries (so called wet processes), in which variables are controlled—as in an alkylation or catalytic cracking process found in a petroleum refinery; or in the manufacture of pulp for paper from wood feedstocks; or in the automatic batching, mixing, and melting of ingredients for making glass and other ceramics. Automatic control systems are also widely used in the discrete-piece manufacturing industries, as encountered in the automated machine shop, in engine assembly, and in the packaging of foods and other products. Automatic control systems find common application in all types of power-generating facilities—hydroelectric, geothermal, conventional fossil-fuel steam plants, solar and nuclear power facilities. Automatic control systems are also found in numerous aspects of transportation, ranging from autopilots for aircraft and automated navigation systems for ships and missile guidance to simpler applications as found in automotive electronic systems.

Van Nostrand's Scientific Encyclopedia, copyright 2002.

With respect to the amended claims, Williams further fails to teach or suggest responding to failure of the compared "processes" to achieve comparable states by rolling back each of the them to a prior states in which a favorable comparison was achieved.

For the foregoing reasons, among others, Williams fails to render obvious the subject matter of the pending claims and, hence, the Section 103 rejection should be reconsidered with withdrawn.

This filing responds in full to the Office Action mailed July 21, 2003. All grounds for objection and rejection are addressed. The drawings and claims are shown to be free of grounds for objection, and the latter are shown to be free of the art. This application, accordingly, should be allowed.

Respectfully submitted,
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